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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,182	10/19/2001	Michel Pairet	1/1244	5693

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EXAMINER
SHEIKH, HUMERA N

ART UNIT	PAPER NUMBER
1615	9

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/007,182	PAIRET ET AL.	
	Examiner	Art Unit	
	Humera N. Sheikh	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-58* is/are pending in the application.

4a) Of the above claim(s) *33-53,57 and 58* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32 and 54-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Status of the Application

Acknowledgement is made of the receipt of the Declaration and the Certified copies of the Priority documents, filed 03/29/02, the Priority Papers filed 10/19/01, the Information Disclosure Statement (IDS) filed 06/27/02 and the Restriction/Election response filed 12/23/02.

Claims 1-32 and 54-56 are pending. Claims 33-53, 57 and 58 have been withdrawn from consideration as being drawn to non-elected subject matter. Claims 1-32 and 54-56 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-32 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarlikiotis et al. (US Pat. No. 6,284,287) *or* Naclerio (Clinical and Experimental Allergy-1998) in view of Garvey et al. (US Pat. No. 5,824,669).

Sarlikiotis teaches a pharmaceutical formulation for administration by inhalation, comprising a mixture of active compounds that include anticholinergics, such as atropine, atropine methonitrate, ipratropium bromide, oxitropium bromide and trospium chloride and antihistaminics, such as azelastine, flezelastine and methapyrilene (see abstract and col. 3, line 24 through col. 4, line 4). The active compounds can be employed as free bases, acids or as pharmaceutically tolerable salts. Counterions which can be employed are, for example, amines, bromide, chloride, iodide, carbonate, etc. (col. 3, lines 55-65).

The formulation, which can consist of a mixture of several finely ground active compounds, can also contain excipients, which have a mean particle size of 200-1000 microns. Suitable excipients are, for example, inorganic and organic salts, monosaccharides, such as glucose and its derivatives, disaccharides, such as lactose, maltose and derivatives, polysaccharides, such as starch and its derivatives and oligosaccharides, such as cyclodextrins. Mixtures of the auxiliaries can also be employed. The ratio of the active compound to the excipient material depends on the substances employed (see col. 3, line 65 through col. 4, line 25).

Sarlikiotis teaches anticholinergics, such as ipratropium bromide and is deficient only in the sense that he does not teach a tiotropium salt.

Garvey teaches pharmaceutical compositions for the treatment of respiratory disorders comprising therapeutically effective amounts of anticholinergic agents, such as atropine, ipratropium, flutropium, *tiotropium* and rispenzepine (see col. 2, line 12 through col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Garvey within the teachings of Sarlikiotis because Garvey teaches the use of tiotropium, ipratropium, etc. in the treatment of respiratory diseases and Sarlikiotis teaches the combination of an anticholinergic agent (i.e., ipratropium bromide) with an antihistamine. The expected result would be an improved tiotropium/antihistamine composition for treating respiratory disorders.

Naclerio teaches a study based on allergic rhinitis wherein the combination of an anticholinergic, ipratropium bromide combined with an antihistamine, can provide additional benefits, as compared to using the anticholinergic or anthistamine alone. The study suggests a synergistic effect can be obtained for the treatment of allergic rhinitis when both active ingredients are administered simultaneously (see pgs. 54-59).

Naclerio teaches the use of ipratropium bromide with an antihistamine and is lacking in that he does not teach tiotropium.

Garvey teaches pharmaceutical compositions for the treatment of respiratory disorders comprising therapeutically effective amounts of anticholinergic agents, such as atropine, ipratropium, flutropium, *tiotropium* and rispenzepine (see col. 2, line 12 through col. 6, line 55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Garvey within the teachings of Naclerio because Garvey teaches the use of tiotropium, ipratropium, etc. in the treatment of respiratory diseases and similarly, Naclerio teaches a study based on allergic rhinitis wherein the combination of an anticholinergic, ipratropium bromide combined with an antihistamine, can provide additional benefits, as compared to using the anticholinergic or anthistamine alone. The expected result would be an effective pharmaceutical formulation for the treatment of respiratory disorders, as similarly desired by the applicant.

Claims 1-32 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarlikiotis et al. (US Pat. No. 6,284,287) *or* Garvey et al. (US Pat. No. 5,824,669) in view of Naclerio (Clinical and Experimental Allergy-1998).

Sarlikiotis teaches a pharmaceutical formulation for administration by inhalation, comprising a mixture of active compounds that include anticholinergics, such as

atropine, atropine methonitrate, ipratropium bromide, oxitropium bromide and trospium chloride and antihistaminics, such as azelastine, flezelastine and methapyrilene (see abstract and col. 3, line 24 through col. 4, line 4). The active compounds can be employed as free bases, acids or as pharmaceutically tolerable salts. Counterions which can be employed are, for example, amines, bromide, chloride, iodide, carbonate, etc. (col. 3, lines 55-65).

The formulation, which can consist of a mixture of several finely ground active compounds, can also contain excipients, which have a mean particle size of 200-1000 microns. Suitable excipients are, for example, inorganic and organic salts, monosaccharides, such as glucose and its derivatives, disaccharides, such as lactose, maltose and derivatives, polysaccharides, such as starch and its derivatives and oligosaccharides, such as cyclodextrins. Mixtures of the auxiliaries can also be employed. The ratio of the active compound to the excipient material depends on the substances employed (see col. 3, line 65 through col. 4, line 25).

Sarlikiotis teaches anticholinergics, such as ipratropium bromide and is deficient only in the sense that he does not teach a tiotropium salt.

Naclerio teaches a study based on allergic rhinitis wherein the combination of an anticholinergic, such as ipratropium bromide combined with an antihistamine, can provide additional benefits, as compared to using the anticholinergic or anthistamine alone. The study suggests a synergistic effect can be obtained for the treatment of

allergic rhinitis when both active ingredients are administered simultaneously (see pgs. 54-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made and one would be motivated to use the teachings of Naclerio within the teachings of Sarlikiotis because Naclerio teaches that a synergistic effect is obtained with the combined use of an anticholinergic and an antihistamine and similarly Sarlikiotis teaches a combined mixture of various drugs that include anticholinergics and antihistamines. The expected result would be an improved treatment for respiratory disease that provides enhanced and added benefits.

Garvey teaches pharmaceutical compositions for the treatment of respiratory disorders comprising therapeutically effective amounts of anticholinergic agents, such as atropine, ipratropium, flutropium, *tiotropium* and rispenzepine (see col. 2, line 12 through col. 6, line 55).

Garvey is deficient in the sense that he does not teach the combined use of an anticholinergic with an antihistamine.

Naclerio teaches a study based on allergic rhinitis wherein the combination of an anticholinergic, such as ipratropium bromide combined with an antihistamine, can provide additional benefits, as compared to using the anticholinergic or anthistamine alone. The study suggests a synergistic effect can be obtained for the treatment of

allergic rhinitis when both active ingredients are administered simultaneously (see pgs. 54-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made and one would be motivated to use the teachings of Naclerio within the teachings of Garvey because Naclerio teaches that a synergistic effect is obtained with the combined use of an anticholinergic and an antihistamine and Garvey teaches various anticholinergics that can be used which include, ipratropium and tiotropium as instantly claimed. The expected result would be an effective pharmaceutical formulation for respiratory-related diseases and disorders.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (703) 308-4429. The examiner can normally be reached on Monday through Friday from 7:00A.M. to 4:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page, can be reached on (703) 308-2927. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

hns
April 07, 2003

THURMAN K. PAGE
SUPERVISORY PATENT EXAMINER
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